

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>TSL01842PCT</b>	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. <b>PCT/JP2004/018531</b>	International filing date (day/month/year) <b>07/12/2004</b>	(Earliest) Priority Date (day/month/year) <b>24/12/2003</b>
Applicant  <b>DOW CORNING TORAY SILICONE CO., LTD.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 7 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☒ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

**DICING/DIE BONDING FILM AND METHOD OF MANUFACTURING THE SAME**

5. With regard to the **abstract**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/018531

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

A dicing/die bonding sheet is made by joining a base film (1) and a silicone based adhesive agent layer (3) through the medium of an undercoat layer (2). This all-in-one dicing/die bonding sheet exhibits superior long-term storage stability and prevents chip delamination during dicing.

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International application No.  
PCT/JP2004/018531

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-6

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-6

A dicing/die bonding tape comprising a silicone based die bonding adhesive and a method of manufacturing the same by forming an undercoat layer and a silicone based adhesive layer on a base film.

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2. claims: 7,8

Method of manufacturing a dicing/die bonding film by first forming a silicone adhesive layer and a undercoat layer on a temporary substrate and then transfer the multilayer stack to a base substrate.

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3. claim: 9

Method of manufacturing a dicing/die bonding film by forming a silicone adhesive based layer, undercoat layer and applying a base film onto a strippable protective layer.

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## INTERNATIONAL SEARCH REPORT

 International Application No  
 PCT/JP2004/018531

 A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 H01L21/68 H01L21/58

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 12, 12 December 2002 (2002-12-12) -& JP 2002 226796 A (HITACHI CHEM CO LTD), 14 August 2002 (2002-08-14)	1,2,4-6
Y	abstract paragraphs [0031], [0033], [0038], [0065], [0076], [0078], [0109]; figures 2,3	3
Y	US 6 319 754 B1 (WANG HOW-SHIN ET AL) 20 November 2001 (2001-11-20) column 2, line 53 - column 3, line 11; figure 4 ----- -/--	3

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

17 February 2005

Date of mailing of the international search report

23/05/2005

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International Application No

PCT/JP2004/018531

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 2004/007628 A (DOW CORNING TORAY SILICONE CO., LTD; SUTOH, MANABU; USHIO, YOSHITO; FU) 22 January 2004 (2004-01-22) paragraphs [0034], [0042] - [0044]; figures 2,3	1,2,4-6
A	----- PATENT ABSTRACTS OF JAPAN vol. 015, no. 383 (E-1116), 27 September 1991 (1991-09-27) -& JP 03 152942 A (NITTO DENKO CORP), 28 June 1991 (1991-06-28) abstract	1-6
A	----- PATENT ABSTRACTS OF JAPAN vol. 016, no. 079 (E-1171), 26 February 1992 (1992-02-26) -& JP 03 268345 A (NITTO DENKO CORP), 29 November 1991 (1991-11-29) abstract	1-6
A	----- EP 0 571 649 A (NITTO DENKO CORPORATION) 1 December 1993 (1993-12-01) column 1, line 50 - line 53; figure 1 claim 1	1-6
A	----- US 5 476 565 A (AKADA ET AL) 19 December 1995 (1995-12-19) claim 1	1-6
A	----- US 6 304 000 B1 (ISSHIKI MINORU ET AL) 16 October 2001 (2001-10-16) the whole document -----	1-6

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2004/018531

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 2002226796	A	14-08-2002	NONE	
US 6319754	B1	20-11-2001	NONE	
WO 2004007628	A	22-01-2004	AU 2003249594 A1 WO 2004007628 A1 JP 2004043814 A	02-02-2004 22-01-2004 12-02-2004
JP 03152942	A	28-06-1991	JP 2665383 B2	22-10-1997
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EP 0571649	A	01-12-1993	EP 0571649 A1	01-12-1993
US 5476565	A	19-12-1995	JP 5179211 A EP 0550014 A2 US 5304418 A	20-07-1993 07-07-1993 19-04-1994
US 6304000	B1	16-10-2001	JP 3420473 B2 JP 11012546 A US 6235862 B1	23-06-2003 19-01-1999 22-05-2001